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Gunnar Dike

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BUCHANAN, INGERSOLL & ROONEY PC
POST OFFICE BOX 1404
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EXAMINER

HEITBRINK, JILL LYNNE

ART UNIT

PAPER NUMBER

1791

NOTIFICATION DATE

DELIVERY MODE

03/10/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

1. The amendment filed December 4, 2008 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The drawing amendment indicating the shape and location of the pressure accumulator (insertion of the arrow and element number 3) does not have support in the original disclosure.

Applicant is required to cancel the new matter in the reply to this Office Action.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "3" has been used to designate both the mandrel and pressure accumulator. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 1, lines 15 and 16 and claim 19, line 8 are unclear and should clearly define "a support device".
6. Claim 17 recites the limitation "the radial guide means" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-3, 5-9, 12, 13 and 15-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farkas Pat. No. 3,881,855.
9. Farkas discloses a device for forming injection moulded plastic articles, including a partible mould having an inner mould tool 84 and two outer mould tools 98 and 100. The outer mould tools 98 and 100 each having a central axis (which the two outer molds coincide during the opening and closing movement as is clear from the movement between Fig. 5 and Fig. 6 of Farkas). The device further comprising a rotatable hub (turret 38), the inner mould tool 84 being supported by the hub (col. 3, lines 22-28 and col. 4, lines 18-23), which is arranged to move the inner mould tool in an essentially

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circular movement into and out of a mould cavity enclosed by the outer mould tools (Fig.

1). The means for opening and closing the outer mould tools are arranged to move the outer mould tools in a first direction which is radial in relation to the hub and a second direction which is perpendicular to the first direction at least partly simultaneously (col. 3, lines 66-69) and directed in the plane of the circular movement of the inner mould tool and moving the outer mould tools so that their central axes coincide throughout the movement. As shown in Figs 3 and 4, Farkas provides means for opening and closing the outer mould tools are arranged to move the outer mould tools along circular arcs. The shape of the surface of the mold provide means for opening and closing the outer mould tools with a plane guide means for guiding the outer mould tools such that they are aligned when closed. These surfaces also provide the radial guide means which moves the outer mold tools relative to the blocks 104. Farkas discloses means for disengaging the outer mould tools from a frame of the device, such as by removing bolts and the tie bars.

10. Farkas teaches the means for opening and closing the outer mould tools including pivotable levers (134) when moving the blow cavity shells. It would have been obvious to a person of ordinary skill in the art to provide pivotable levers for moving the outer molds 98 and 100 depending upon the size of the undercut region of the molded product which must be removed from the mold halves 98 and 100 since levers provide a larger arc of movement. The mounting part being fixed would have been obvious in Farkas when the turret is intermittently rotated rather than continuously.

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11. Claims 1-3, 5-9, 12, 13 and 15-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reil et al. (German reference 4018484) taken together with anyone of Reil et al. Pat. No. 4,781,012 or Reil et al. Pat. No. 4,525,318 or Reil Pat. No. 5,004,411.

12. Reil '484 discloses moving the mandrel (6) to an outer mold tool (8 and 8'), positioning the outer mold tool around the inner mold tool by moving two halves of the outer mold tool in a first direction, which is radial in relation to the axis (10) about which the mandrel moves, and a second direction, which is perpendicular to the first direction and directed in a plane of the movement of the mandrel and injecting plastic material into the cavity to form a plastic attachment to a workpiece (abstract).

13. Reil '012, '318 and '411 each teach positioning a carton sleeve (abstract, paper tube) on an inner mold tool (mandrel), moving the mandrel with the carton sleeve to an outer mold tool, positioning the outer mold tool around the inner mold tool and carton sleeve by moving two halves of the outer mold tool in a first direction, which is radial in relation to the axis about which the mandrel moves, and a second direction, which is perpendicular to the first direction.

14. It would have been obvious to a person of ordinary skill in the art that the mandrel's in Reil '484 are intended to have a carton sleeve thereon since Reil'484 is injecting onto a workpiece which would have been describing the carton sleeve of similar Reil molding devices.

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15. Reil '012, '318 and '411 each teach a pair of levers having one end pivotably attached to the outer mold tools and the other end of the lever pivotably attached to a mounting part of a support device.

16. It would have been obvious to a person of ordinary skill in the art to attach levers between the outer mold tools and a support in Reil '484 since the outer mold tools are moved in a similar pivotal movement and would not interfere with the rotation of the mandrel about the shaft since the levers may be positioned outwardly of the mandrel movement.

Allowable Subject Matter

17. Claims 6, 10 and 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The prior art does not teach the claimed injection molding device including the specific movement of the pivotable levers driven by belt drive means. The prior art does not teach the claimed injection molding device including the radial guide means including bars on which the plane guide means are guided.

Response to Arguments

18. Applicant's arguments filed December 4, 2008 have been fully considered but they are not persuasive.

19. Applicant argues that if the cams were replaced with pivotable levers in Farkas then the cavity blocks would not be able to move to and from each other due to the abutment with neck ring 160 during pivot opening. However, the cavity blocks 98, 100

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move away from the neck ring 160 during opening as indicated by Farkas, col. 5, lines 19-21, "Further motion of mold 30 to the right in FIG. 6 separates the parts 98,100 from the blow cavity mold 46".

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

21.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill L. Heitbrink whose telephone number is (571) 272-1199. The examiner can normally be reached on Monday-Friday 9 am -2 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jill L. Heitbrink/
Primary Examiner, Art Unit 1791

Jill L. Heitbrink
Primary Examiner
Art Unit 1791

jlh